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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,580

11/25/2003

Richard L. Brunson

BOEI-1-1221

5792

7590

05/24/2004

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EXAMINER

GREGORY, BERNARR E

ART UNIT

PAPER NUMBER

3662

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/721,580

Applicant(s)

BRUNSON ET AL.

Examiner

Bernarr E. Gregory

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-27 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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1. Claims 1-8 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 3 of independent claim 1, the word "irradiating" is indefinite and unclear in context. Using the ordinary meaning of the word "irradiating," line 3 of claim 1 would mean, "shining light from one light source on a second light source within the first image," but this does not appear to be what is meant. In the normal use of the verb "irradiate," the direct object is the thing on which the light is directed. Please see the dictionary definition for "irradiate" below.

## Merriam-Webster's Online Dictionary



Search



Main Entry: **ir·ra·di·ate**

Pronunciation: i-'rA-dE-"At

Function: *verb*

Inflected Form(s): -at·ed; -at·ing

Etymology: Latin *irradiatus*, past participle of *irradiare*, from *in-* + *radius* ray

Date: 1603

*transitive senses*

1 a : to cast rays of light upon : ILLUMINATE b : to enlighten intellectually or spiritually  
c : to affect or treat by radiant energy (as heat); *specifically* : to treat by exposure to radiation

2 : to emit like rays of light : RADIATE <*irradiating* strength and comfort>

*intransitive senses, archaic* : to emit rays : SHINE

- **ir·ra·di·a·tive** /-'A-tiv/ *adjective*

- **ir·ra·di·a·tor** /-'A-t&r/ *noun*

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On line 5 of claim 1, "the irradiated light source" is also indefinite and unclear for the same reasons. On lines 7-8 of claim 1, it is unclear if the "inertial reference information" determined is a correction for an inertial navigation unit.

Dependent claims 2-8 are unclear in that they depend from unclear independent claim 1.

Dependent claim 28 is indefinite and unclear in that a portion of the text of the claim is missing. Claim 28 currently reads as follows: "The system of Claim 27, wherein the ground based system". The claim ends in mid-sentence and has no period to close the claim.

2. Claims 9-27 are allowable over the prior art of record.
3. Drawing Figure 1 is objected to under 37 CFR 1.84(o) in that box-type drawing elements 20, 22, 58, 34, and 36 lack descriptive labelling. For example, if a box-type drawing elements represents a transmitter, then it must be labelled "TRANSMITTER." Correction is hereby **required**.
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examiner-cited prior art herewith is of general interest for relating to navigation or guidance using electronic observation of stars.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernarr E. Gregory whose telephone number is (703) 306-5765. The examiner can normally be reached on weekdays from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza, can be reached on (703) 306-4171. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Bernarr E. Gregory  
Primary Examiner  
Art Unit 3662